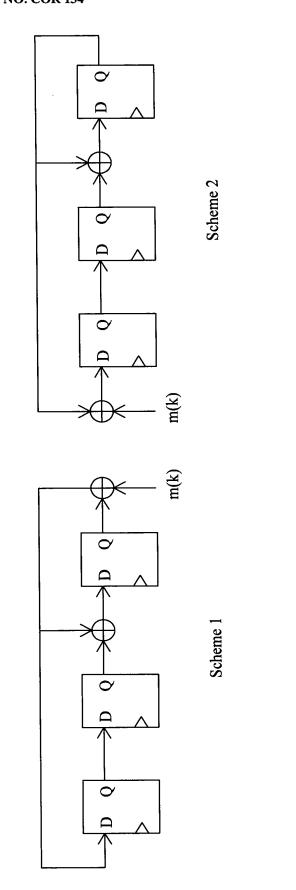
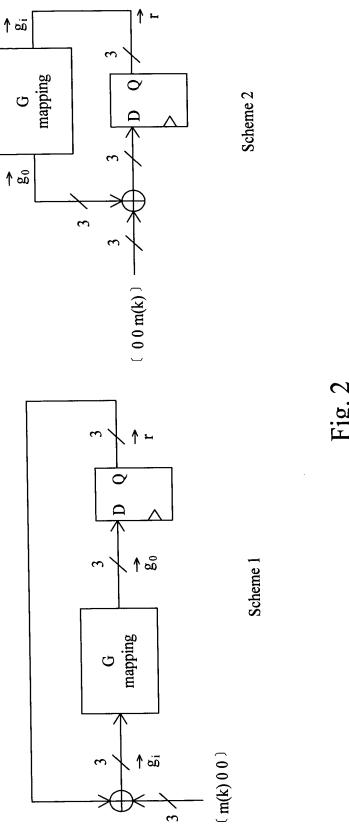
RABIN & BERDO, P.C. CUSTOMER NO: 23995 APPLICANT: Kovsky T. J. TSAI et al. TITLE: PARALLELIZED CRC FILED: September 23, 2003 ATTY DKT. NO. COR 134



 $g(x) = x^3 + x^2 + 1$

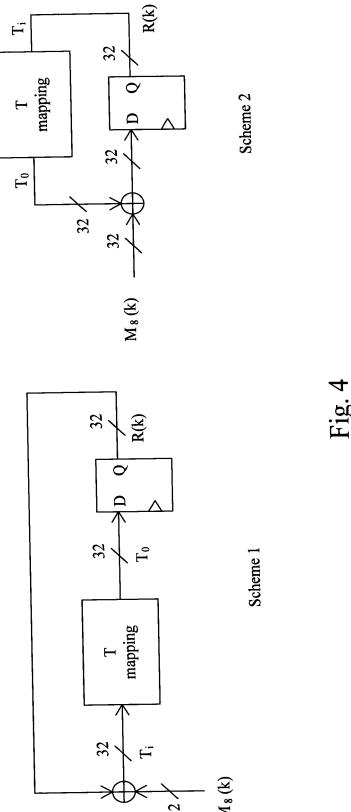
Fig. 1

RABIN & BERDO, P.C. CUSTOMER NO: 23995 APPLICANT: Kovsky T. J. TSAI et al. TITLE: PARALLELIZED CRC FILED: September 23, 2003 ATTY DKT. NO. COR 134



	/			/	\
	Row31	0x40000000	$\mathbf{G}_{ ext{-}1}$ =	Row31	0x00000001
	Row30	0x20000000		Row30	0x80000000
	Row29	0x10000000		Row29	0x40000000
	Row28	0x08000000		Row28	0x20000000
	Row27	0x04000000		Row27	0x10000000
	Row26	0x82000000		Row26	0x08000000
	Row25	0x01000000		Row25	0x04000001
	Row24	0x00800000		Row24	0x02000000
	Row23	0x80400000		Row23	0x01000000
	Row22	0x80200000		Row22	0x00800001
	Row21	0x00100000		Row21	0x00400001
	Row20	0x00080000		Row20	0x00200000
	Row19	0x00040000		Row19	0x00100000
	Row18	0x00020000		Row18	0x00080000
	Row17	0x00010000		Row17	0x00040000
C -	Row16	0x80008000		Row16	0x00020000
G =	Row15	0x00004000		Row15	0x00010001
	Row14	0x00002000		Row14	0x00008000
	Row13	0x00001000		Row13	0x00004000
	Row12	0x80000800		Row12	0x00002000
	Row11	0x80000400		Row11	0x00001001
	Row10	0x80000200		Row10	0x00000801
	Row9	0x00000100		Row9	0×00000401
	Row8	0x80000080		Row8	0x00000200
	Row7	0x80000040		Row7	0x00000101
	Row6	0x00000020		Row6	0x00000081
	Row5	0x80000010		Row5	0x00000040
	Row4	0x80000008		Row4	0x00000021
	Row3	0x00000004		Row3	0x00000011
	Row2	0x80000002		Row2	0x00000008
	Row1	0x80000001		Row1	0x00000005
	Row0	0x80000000]	Row0	0x00000003
			•		/

Fig. 3

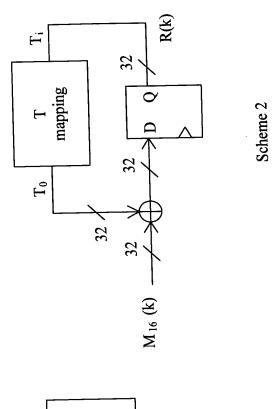


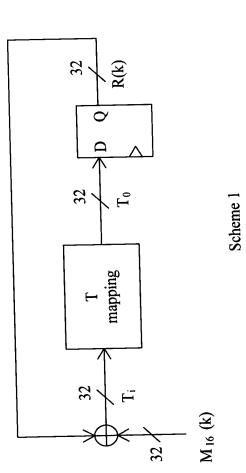
	/	\			/	\	
	Row31	0x20800000	2	3 4 4 5 5 5 5 8 4 4 4 4 7 -1 = G -8 = 6 7 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Row31	0x000000d5	5
	Row30	0x90400000	3		Row30	0x0000006a	4
	Row29	0xc8200000	4		Row29	0x00000035	4
	Row28	0x64100000	4		Row28	0x0000001a	3
	Row27	0xb2080000	5		Row27	0x0000000d	3
	Row26	0x59040000	5		Row26	0x00000006	2
	Row25	0x0c020000	3		Row25	0x000000d6	5
	Row24	0x86010000	4		Row24	0x0000006b	5
	Row23	0x43008000	4		Row23	0x80000035	5
	Row22	0x01004000	2		Row22	0x400000cf	7
	Row21	0x20002000	2		Row21	0x200000b2	5
	Row20	0x10001000	2		Row20	0x10000059	5
	Row19	0x88000800	3		Row19	0x0800002c	4
	Row18	0xc4000400	4		Row18	0x04000016	4
	Row17	0x62000200	4		Row17	0x0200000b	4
$L = C_8 =$	Row16	0x31000100	4		Row16	0x01000005	3
1 - 0 -	Row15	0xb8000080	5		Row15	0x008000d7	7
	Row14	0xdc000040	6		Row14	0x0040006b	6
	Row13	0xee000020	7		Row13	0x00200035	5
	Row12	0x77000010	7		Row12	0x0010001a	4
	Row11	0x1b000008	5		Row11	0x000800d8	5
	Row10	0x2d000004	5		Row10	0x000400b9	6
	Row9	0x36000002	5		Row9	0x00040089	4
	Row8	0x1b000001	5		Row8	0x00020044	3
	Row7	0xad000000	5		Row7	0x000080f7	8
	Row6	0xf6000000	6		Row6	0x000040ae	6
	Row5	0xfb000000	7		Row5	0x00002057	6
	Row4	0x5d000000	5		Row4	0x000010fe	8
	Row3	0x8e000000	4		Row3	0x000008aa	5
	Row2	0xc7000000	5		Row2	0x00000455	5
	Row1	0xc3000000	4		Row1	0x000002ff	9
	Row0	0x41000000	2		Row0	0x000001aa	5
	\	/			\	/	

Fig. 5

	/	\			,	\	
	Row31	0x8b208000	6	ſ	Row31	0x0000d558	8
	Row30	0x45904000	6		Row30	0x00006aac	8
	Row29	0x22c82000	6		Row29	0x00003556	8
	Row28	0x11641000	6		Row28	0x00001aab	8
	Row27	0x08b20800	6		Row27	0x00000d55	7
	Row26	0x04590400	6		Row26	0x000006aa	6
	Row25	0x890c0200	6		Row25	0x0000d60d	8
1	Row24	0x44860100	6		Row24	0x00006b06	7
	Row23	0xa2430080	7		Row23	0x00003583	7
	Row22	0x5a010040	6		Row22	0x0000cf99	10
	Row21	0x26200020	5		Row21	0x0000b294	7
	Row20	0x13100010	5		Row20	0x0000594a	7
:	Row19	0x89880008	6		Row19	0x00002ca5	7
	Row18	0xc4c40004	7		Row18	0x00001652	6
	Row17	0x62620002	7		Row17	0x00000b29	6
$T = G^{16} = $	Row16	0x31310001	7	$T^{-1} = G^{-16} =$	Row16	0x00000594	5
1-0 -	Row15	0x93b80000	8	1 = G =	Row15	0x8000d792	10
	Row14	0xc9dc0000	9		Row14	0x40006bc9	10
	Row13	0x64ee0000	9		Row13	0x200035e4	9
	Row12	0xb2770000	10		Row12	0x10001af2	9
	Row11	0xd21b0000	8		Row11	0x0800d821	7
	Row10	0x622d0000	7		Row10	0x0400b948	8
	Row9	0x3a360000	8		Row9	0x040089fc	10
	Row8	0x1d1b0000	8		Row8	0x010044fe	10
	Row7	0x85ad0000	8		Row7	0x0080f727	12
	Row6	0x49f60000	9		Row6	0x0040aecb	11
	Row5	0x24fb0000	9		Row5	0x00205765	10
	Row4	0x995d0000	9		Row4	0x0010feea	13
	Row3	0xc78e0000	9		Row3	0x0008aa2d	9
	Row2	0x63c70000	9		Row2	0x00045516	8
	Row1	0x3ac30000	8		Row1	0x0002ffd3	14
	Row0	0x16410000	5		Row0	0x0001aab1	9
	\	/			\	/	

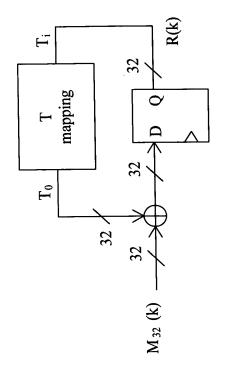
Fig. 6

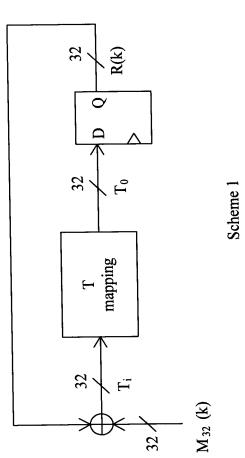




	/	\			/	\			
	Row31	0xfb808b20	13		Row31	0xd558a113	14		
	Row30	0x7dc04590	13		Row30	0x6aac5089	13		
	Row29	0xbee022c8	14		Row29	0x35562844	12		
	Row28	0x5f701164	14		Row28	0x1aab1422	12		
	Row27	0x2fb808b2	14		Row27	0x0d558a11	12		
	Row26	0x97dc0459	15		Row26	0x06aac508	11		
	Row25	0xb061890c	13		Row25	0xd60dc397	17		
ļ	Row24	0x58374486	13		Row24	0x6b06e1cb	16		
	Row23	0xac1ba243	14		Row23	0x358370e5	15		
	Row22	0xad8d5a01	14		Row22	0xcf991961	16		
	Row21	0xad462620	12		Row21	0xb2942da3	15		
:	Row20	0x56a31310	12		Row20	0x594a16d1	14		
	Row19	0x2b518988	12		Row19	0x2ca50b68	13		
	Row18	095a8xc4c4	13		Row18	0x165285b4	13		
	Row17	0xcad46262	14		Row17	0x0b2942da	13		
$T = G^{32} =$	Row16	0x656a3131	14	$T^{-1} = G^{-32} =$	Row16	0x0594a16d	13		
1 0	Row15	0x493593b8	15		Row15	0xd792f1a5	18		
	Row14	0x249ac9dc	15		Row14	0x6bc978d2	17		
	Row13	0x924d64ee	16		Row13	0x35e4bc69	17		
	Row12	0xc926b277	17		Row12	0x1af25e34	16		
	Row11	0x9f13d21b	17		Row11	0xd8218e09	12		
	Row10	0xb409622d	13		Row10	0xb9486617	15		
	Row9	0x21843a36	12		Row9	0x89fc9218	14		
	Row8	0x90c21d1b	13		Row8	0x44fe490c	14		
	Row7	0x33e185ad	16		Row7	0xf7278595	18		
	Row6	0x627049f6	15		Row6	0xaecb63d9	19		
	Row5	0x313824fb	15		Row5	0x5765b1ec	18		
	Row4	0xe31c995d	17		Row4	0xfeea79e5	22		
	Row3	0x8a0ec78e	15		Row3	0xaa2d9de1	17		
	Row2	0xc50763c7	16		Row2	0x5516cef0	16		
	Row1	0x19033ac3	13		Row1	0xffd3c66b	22		
	Row0	0xf7011641	13		Row0	0xaab14226	13		
	\	/		/					

Fig. 8





Scheme 2